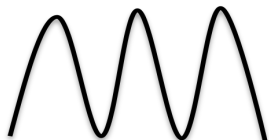


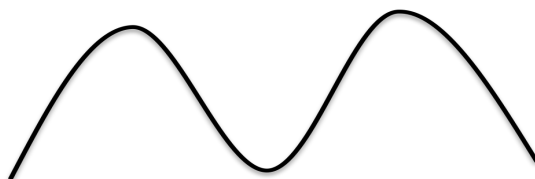
Name \_\_\_\_\_

AE Chemistry  
Wave/Energy Questions

Use the two waves below to answer the following questions.



A



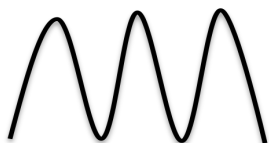
B

1. Which of the two waves has the longer wavelength? \_\_\_\_\_
2. Which of the two waves has the higher frequency? \_\_\_\_\_
3. If the waves A and B are electromagnetic radiation (light), which wave will travel faster?

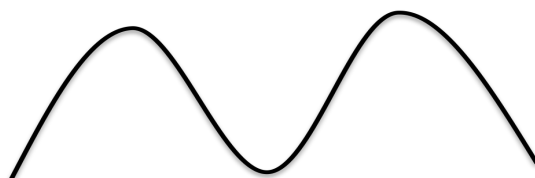
Complete the sentences below using your notes:

4. If the wavelength of a wave increases the frequency will \_\_\_\_\_.
5. If the frequency of a wave increases the wavelength will \_\_\_\_\_.
6. A(n) \_\_\_\_\_ proportion exists between wavelength and frequency of a wave.
7. Electromagnetic radiation transmits \_\_\_\_\_.
8. Max Planck said that "Energy behaves like \_\_\_\_\_, because it comes in packets called \_\_\_\_\_."
9. Einstein called packets of light \_\_\_\_\_.

Use the two waves below to answer the following question.



A



B

10. How did Max Planck relate the energy of a wave to its frequency?

11. Of the two waves above which will have a higher energy? \_\_\_\_\_